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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,027	02/28/2002	Domonkos Horvath	10642.9USWO	3517

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EXAMINER

O CONNOR, CARY E

ART UNIT	PAPER NUMBER
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3732

DATE MAILED: 07/15/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,027

Applicant(s)

HORVATH ET AL

Examiner

Cary E. O'Connor

Art Unit

3732

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28²⁹ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-11,13,14,16 and 18-28²⁹ is/are rejected.
- 7) ☒ Claim(s) 3-5,12,15 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachments

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18, 21 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 18, the phrase "preferably" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

In claim 21, the alternative language used along with the term "respectively" is confusing.

Claim 28 is unclear as it appears to be claiming the cavity of claim 26. A dependent claim must include all of the limitations of the previous claims. Also, this is confusing because the cavity is not positively claimed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 11, 13, 24, 25 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmidt (DE 19627865). Schmidt shows a medical membrane 20 comprising at least one roughened surface (due to particles) which has a porous (semi permeable) surface (see English translation of the abstract). As to claim 2, note the cement 10. As to claim 11, note that the membrane is circular in shape (see Fig. 2). As to claim 13, note the reinforcement 21. As to claim 24 and 25, one would inherently fill the cavity above the membrane with a restorative material to provide an occlusive surface.

Claims 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Malmin (3,949,479). Malmin shows a device comprising a handle 42 and a skeleton form 43 which may be removed from the handle and left in the tooth cavity to become embedded in a filling in the cavity.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-10 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt (DE 19627865). It would have been obvious to provide membranes having various surface areas and thicknesses in order to fit various size cavities, as no two cavities are sized and shaped the same.

Claims 6, 14, 16 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt (DE 19627865) in view of Walser (DE 953831). Schmidt does not teach an adhesive coating to adhere the membrane to the dentine. Walser shows membranes for protection of dental pulp which have adhesive properties and are carried on a carrier foil 1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the membrane with adhesive properties and mount the membranes on a carrier sheet, in view of Walser, so that the membrane may be more securely held in the cavity while the cavity is being filled. As to claim 28, Schmidt does not show a device for applying the membrane to the cavity. Walser shows an application device 10 for placing a membrane in a tooth cavity. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the membrane of Schmidt in a kit with an application device as taught by Walser, in order to make it easier to place the membrane in the cavity.

Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt (DE 19627865) in view of Roubian (2,644,232). Roubian shows a membrane for a pulp cavity which includes a medicinal substance and is impermeable to molecules and ions. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the membrane of Schmidt with a medicinal substance such as a growth factor and make the membrane impermeable to molecules and ions, in view of Roubian, in order to encourage cell growth in the pulp chamber.

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt (DE 19627865) in view of Bartee et al (5,957,690). Schmidt does not specify

the material of the membrane. Bartee teaches that PTFE, resorbable polymers and collagen have been suitably used to form medical membranes for tissue regeneration (col. 1, lines 18-22). It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the membrane of Schmidt of PTFE, a resorbable polymer, or collagen, in view of Bartee, as these materials would enhance the regrowth of cells in the pulp chamber.

Allowable Subject Matter

Claims 3-5, 12, 15, 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 46 (fig. 13). A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cary E. O'Connor whose telephone number is 703-308-2701. The examiner can normally be reached on M-Th 7am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on 703-308-0858. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-2708 for regular communications and 703-308-2708 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.


Cary E. O'Connor
Primary Examiner
Art Unit 3732

ceo
July 13, 2003